

# MARKETING AND POLICY BRIEFING PAPER

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## **Dairy Title: Farm Security and Rural Investment Act of 2002**

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### **Evolution of the Dairy Title**

The 2002 Farm Bill, technically the Farm Security and Rural Investment Act of 2002, was signed into law by President George W. Bush on May 13, 2002. As usual, passage of the new farm act was a lengthy and contentious process. And also as usual, many sticking points related to dairy provisions.

The House of Representatives passed its version of the farm bill in early October. The dairy title of the House bill was relatively simple: It extended the dairy price support program at the current \$9.90 level and authorized up to two butter-powder price “tilts” per year. It also extended the Dairy Export Incentive Program (DEIP) and the processor-funded fluid milk promotion program, made imported dairy products subject to the same promotion assessment paid by U.S. dairy farmers, and mandated reporting of dairy product inventories.

The Senate deliberation on dairy began in earnest after passage of the house bill, but progressed in fits and starts. The Northeast Interstate Dairy Compact expired on September 30, 2001, and Vermont Senators Leahy and Jeffords were committed to either reinstating the compact in the Senate dairy title or crafting a similar form of regional price enhancement for the Northeast. While many other senators philosophically opposed a separate regional dairy program, Senate democrats were apparently united in offering compensation to Senator Jeffords for changing his party affiliation and giving the democrats control of the Senate in the 107<sup>th</sup> Congress.

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After considering several proposals involving direct payments that differentiated between the Northeast and the rest of the country, the Senate eventually settled on a plan that involved two separate deficiency payment programs for dairy. One applied to the six New England states that were included in the Northeast Interstate Dairy Compact (Maine, New Hampshire, Vermont, Massachusetts, Connecticut and Rhode Island) plus six additional northeastern states (New York, Pennsylvania, New Jersey, Maryland, Delaware and West Virginia). The Northeast plan used a target price of \$16.94 per hundredweight referenced against the Class I price at Boston. In any month when the Boston Class I price was less than \$16.94, all producers within the applicable region would receive 45 percent of the difference.

For the rest of the U.S., deficiency payments would be made quarterly using a target price equal to the five-year average U.S. all-milk price for the quarter. In any quarter when the all-milk price fell below the five-year average, all producers in the 38 states outside the defined Northeast regions would receive 40 percent of the difference.

The remainder of the Senate dairy title was similar or identical to the House version – extension of the dairy price support program at \$9.90 (but without authority for “tilts”), and the DEIP and processor fluid milk promotion programs; promotion assessment on imports; and mandatory reporting of inventories.

The Senate finally approved its farm bill on February 13, 2002, and the process moved to conference. It became apparent early on that separate dairy deficiency payment programs for the Northeast and the rest of the country would not fly. The debate moved to how to retain vestiges of the Northeast compact within a national program. What ultimately emerged was the Northeast plan applied nationally.

## **Description and Assessment of the Dairy Title<sup>2</sup>**

Highlights of the newly-enacted dairy provisions are:

- Makes direct payments to all U.S. dairy farmers based on the Boston Class I milk price relative to \$16.94 per hundredweight. Payments are monthly from December 2001 through September 2005, and are capped at 2.4 million pounds annual marketings.
- Extends the dairy price support program through December 31, 2007, at a support level of \$9.90 for milk of average butterfat content. The Secretary is permitted to alter the relative butter and nonfat dry milk purchase prices as often as twice per year to minimize program costs. Previous legislation authorizing a processor recourse loan program is rescinded.

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<sup>2</sup> This paper covers only the dairy title of the new farm bill. Other provisions affecting dairy are included in other titles. Of particular note, Section 409 of the research title authorizes USDA (in coordination with state veterinarians) to establish research, testing, and evaluation of programs to control Johne's disease. Annual funding authorization for Johne's research is “...as may be necessary” through September 2007

- Continues the Dairy Export Incentive (DEIP) and Dairy Indemnity (DIP) Programs.
- Continues and clarifies the processor-funded fluid milk promotion program (MilkPEP).
- Makes reporting of dairy product inventories mandatory.
- Requires importers of dairy products to pay an assessment equivalent to the 15-cent per hundredweight National Dairy Promotion and Research assessment on U.S. dairy farmers.
- Charges USDA to conduct three economic studies and report back to Congress.

### **National Dairy Market Loss Payments**

The direct payment program for dairy is a target price-deficiency payment program similar to what has been used under several commodity programs since the 1970s. In general, target price-deficiency payment programs pay farmers a *deficiency payment* equal to any positive difference between a *target price* and a defined *market price*.

Under the new dairy program, the reference target and market prices relate to Boston market Class I prices. The target price is \$16.94 per hundredweight. The market price used to compare with the target price is the announced monthly Class I price at Boston under the Northeast federal milk marketing order. The deficiency payment, which applies only in those months when the market price is less than the target price, is 45 percent of the difference between \$16.94 and the Boston Class I price.

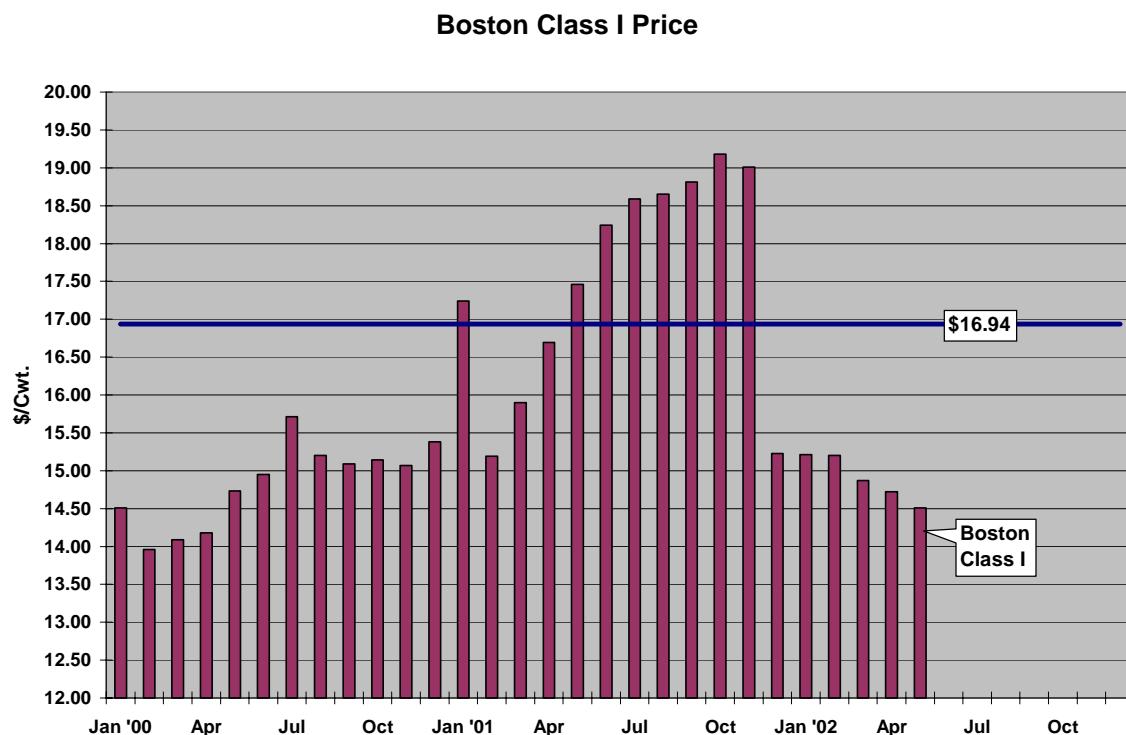
Monthly payments will be made to producers on actual milk marketings up to 2.4 million pounds per year. It is not clear from the language of the Act how the annual cap will be imposed, that is, whether producers will be ineligible for any further payments once they have marketed 2.4 million pounds of milk or whether the annual cap will be scaled to a monthly equivalent. Neither is it clear how USDA will determine whether producers are producers on separate dairy operations or a single dairy operation for purposes of applying the 2.4 million pound annual cap. The Act states that the criteria will be those used in administering the 2001 Dairy Market Loss Assistance Program, but those criteria are not apparent.

While payments per operation are capped, there is no limit on aggregate payments over the life of the program. The Congressional Budget Office (CBO) “scored” the cost of the program at \$1.3 Billion. Our estimate of total costs is over \$3.0 Billion.

The Dairy Market Loss Program will run from December 2001 through September 2005. USDA’s Farm Service Agency (FSA) will begin producer sign-up in mid June and end

on September 30. Payments will be made monthly, no later than 60 days after the month to which they apply. Retroactive payments will be made to producers for the months from December 2001 through the sign-up month.

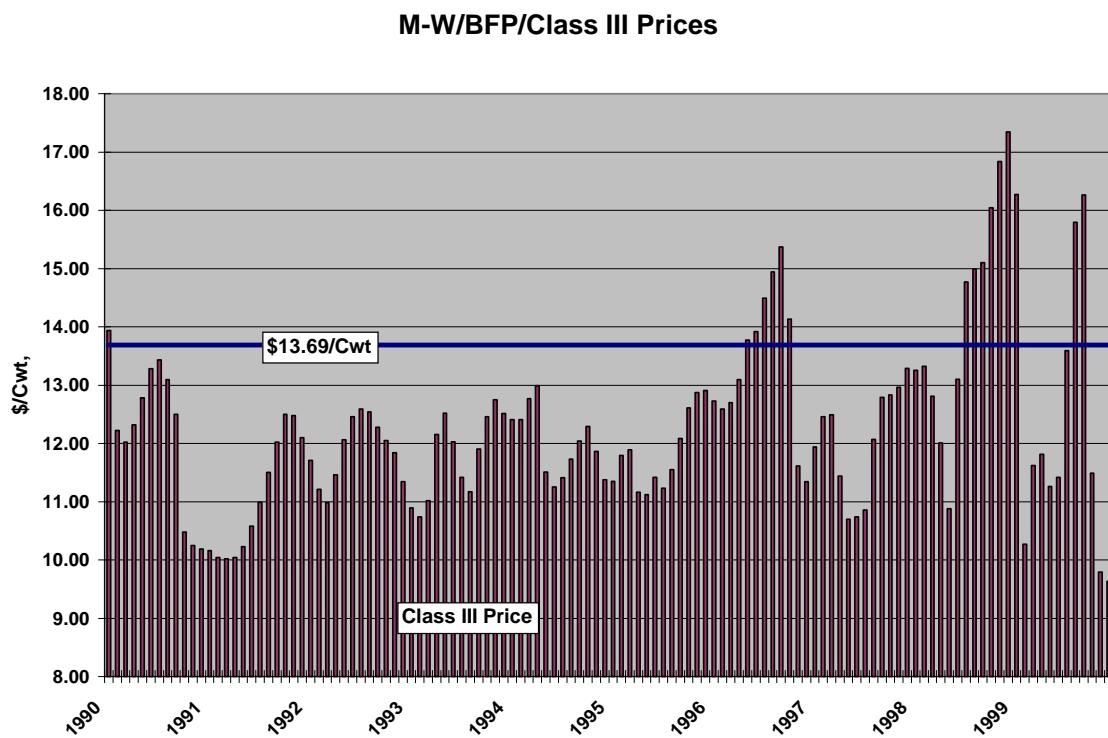
The market loss program will offer substantial benefits to dairy farmers, at least those with small to medium herds. The target price of \$16.94 is higher than the recent average Boston Class I price, so the program will likely involve significant producer price enhancement. Since federal orders were consolidated in January 2000 through May 2002, the difference was just over \$1.00 per hundredweight, suggesting an average maximum payout of \$0.45 per hundredweight.



From December 2001 through May 2002, the Boston Class I price has averaged \$14.96 per hundredweight, \$1.98 per hundredweight under the \$16.94 target. This translates to an average deficiency payment of \$0.89 per hundredweight on milk marketed over the 6-month period. Note that subject to the 2.4 million pound cap, this \$0.89 payment is “locked in” on milk already produced and marketed.

Another way of assessing how frequently payments will be made and how large they will be is to compare the Class I mover equivalent to the \$16.94 Boston price with historical levels. Prior to January 2000, the Class I mover was the Class III price lagged two months, and the Class I price was derived by adding the Class I differential to the lagged Class III price. Subtracting the Boston Class I differential of \$3.25 per hundredweight from the \$16.94 target price yields an equivalent Class III price of \$13.69.

Over the 10 year period 1990 through 1999, the Class III price averaged \$12.28, or \$1.41 less than the equivalent Class III target price of \$13.69. This is consistent with an average deficiency payment of \$0.63 per hundredweight. The Class III price was below the target in 104 of 120 months (87 percent).



While history is a guide to probable levels of deficiency payments in the future, it must be recognized that price enhancement associated with the payments will trigger a supply response. This will have two effects. First, expanded supply will reduce market prices, reducing the benefits of the market loss program to recipients. Second, reduced market prices will lower the Boston Class I price relative to the \$16.94 target price and thus increase the deficiency payment. These offsetting effects make it harder to predict the net effect of supply response on producer pay prices.

The Food and Agricultural Policy Research Institute (FAPRI) predicts that the supply increase associated with dairy market loss payments will reduce the Class III and Class IV prices by \$0.17 and \$0.28 per hundredweight, respectively, over the life of the program.<sup>3</sup> The monthly payment rate (amount paid on marketings under the 2.4 million pound annual cap) is predicted to average \$0.89 per hundredweight. Predicted net producer benefits vary by state, depending on the average herd size within the state. For

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<sup>3</sup> These estimates are as of May 6, 2002, and are subject to revision. For subsequent revisions, see [http://www.fapri.missouri.edu/FAPRI\\_Welcome.htm](http://www.fapri.missouri.edu/FAPRI_Welcome.htm).

Wisconsin, FAPRI predicts an average net revenue gain per hundredweight of \$0.56 (considering both the negative price effect and the payment cap). In comparison, states with very large herd sizes (Arizona, California, Florida Idaho and New Mexico) are predicted to experience net *losses* on average. In these large herd states, the payment cap is small relative to annual herd milk production. So the average payment per hundredweight of milk marketed is not large enough to offset the reduction in market prices.<sup>4</sup>

Using FAPRI's \$0.89 estimate of the average payment rate, annual and per hundredweight deficiency payments are shown in the table below for herds of varying size and milk production per cow.

### Predicted Annual Dairy Market Loss Payments

Herd Size (Cows)	Annual Milk per Cow (Pounds)							
	15,000		17,500		20,000		22,500	
	\$/Year	\$/Cwt	\$/Year	\$/Cwt	\$/Year	\$/Cwt	\$/Year	\$/Cwt
50	6,675	0.89	7,788	0.89	8,900	0.89	10,012	0.89
75	10,012	0.89	11,681	0.89	13,350	0.89	15,019	0.89
100	13,350	0.89	15,575	0.89	17,800	0.89	20,025	0.89
150	20,025	0.89	21,360	0.81	21,360	0.71	21,360	0.63
200	21,360	0.71	21,360	0.61	21,360	0.53	21,360	0.47
500	21,360	0.28	21,360	0.24	21,360	0.21	21,360	0.19
1,000	21,360	0.14	21,360	0.12	21,360	0.11	21,360	0.09
2,000	21,360	0.07	21,360	0.06	21,360	0.05	21,360	0.05

The dairy market loss payments will provide a welcome boost to dairy farmers' incomes. But we question the regular, longer-term use of direct payments. The anticipated frequency and level of payments are not consistent with a program designed to temporarily cushion the impact of below-average milk prices. Payments will be made even when prices are above average. To the extent that the direct payments are viewed by farmers as tied to production (which seems inevitable), they will encourage milk production higher than competitive levels. Experience with federal grain and oilseed programs in recent years makes this abundantly clear. These programs have encouraged excessive plantings and driven market prices to below costs of production for many if not most producers.

We are also concerned about remnants of the Northeast compact in the market loss payment provisions – use of the compact Class I price target of \$16.94 and the reference Boston Class I market price. Because of linkages through federal order pricing formulas, it makes no practical difference what federal order price is used as a reference. Using

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<sup>4</sup> Net revenue estimates could change significantly depending on how leniently FSA interprets and applies the payment limitation.

\$16.94 as a target and Boston as the reference Class I market suggests the Northeast compact has been extended to the rest of the country. Despite Senator Leahy's press releases supporting that suggestion, the dairy market loss program is *NOT* a national compact. It is a deficiency payment program that is national in scope and funded by taxpayers, not fluid milk consumers. Only incidentally, or perhaps of political necessity, does the program use prices in the Northeast to set payments

Finally, we worry about what happens when the market loss program expires in 2005. The result of program-induced supply expansion will be lower market prices at expiration. Will direct payments become a permanent fixture of dairy policy, separating production decisions from the marketplace? Will a lack of federal funding for direct payments lead to cries to adopt regional compacts to replace the treasury payments?

### **Dairy Price Support Program**

Dairy price supports, which operate through Commodity Credit Corporation (CCC) offers to purchase butter, cheddar cheese, and nonfat dry milk at specified prices, have been a fixture of dairy policy since 1949. The 1996 farm bill terminated the price support program effective December 31, 1999, and replaced it with a recourse loan program for processors. Processors could receive government loans at specified loan rates (equivalent to the old CCC purchase prices) using stocks of butter, cheese and nonfat dry milk as collateral. The "recourse" part of the program meant that the loans had to be repaid – the CCC would not take ownership of the stocks even if product prices failed to reach the loan rates.

The price support program was extended prior to its scheduled termination, and the recourse loan program was never triggered. The 2002 bill reauthorizes the support program at the existing support price for milk – \$9.90 for milk of average (3.67 percent) butterfat and \$9.80 for milk testing 3.5 percent butterfat – through December 31, 2007. It also rescinds the redundant recourse loan program.

Butter-powder "tilts" are reauthorized in the new Act. Tilts refer to changing relative prices for butter and nonfat dry milk in the formulas that USDA uses to convert the support price for milk to the CCC purchase prices. The combined value of butter and nonfat dry milk that can be made from a hundredweight of milk (less a make allowance) must equal the support price. That means that the butter and nonfat dry milk prices can be altered (tilted) by reducing one price and increasing the other to maintain value per hundredweight. The last tilt was made in May 2001 when the Secretary, in response to increasing purchases and government stocks of nonfat dry milk, reduced the support price on nonfat dry milk (\$1.01 per pound to \$0.90) and increased it on butter (\$0.65 per pound to \$0.8548).

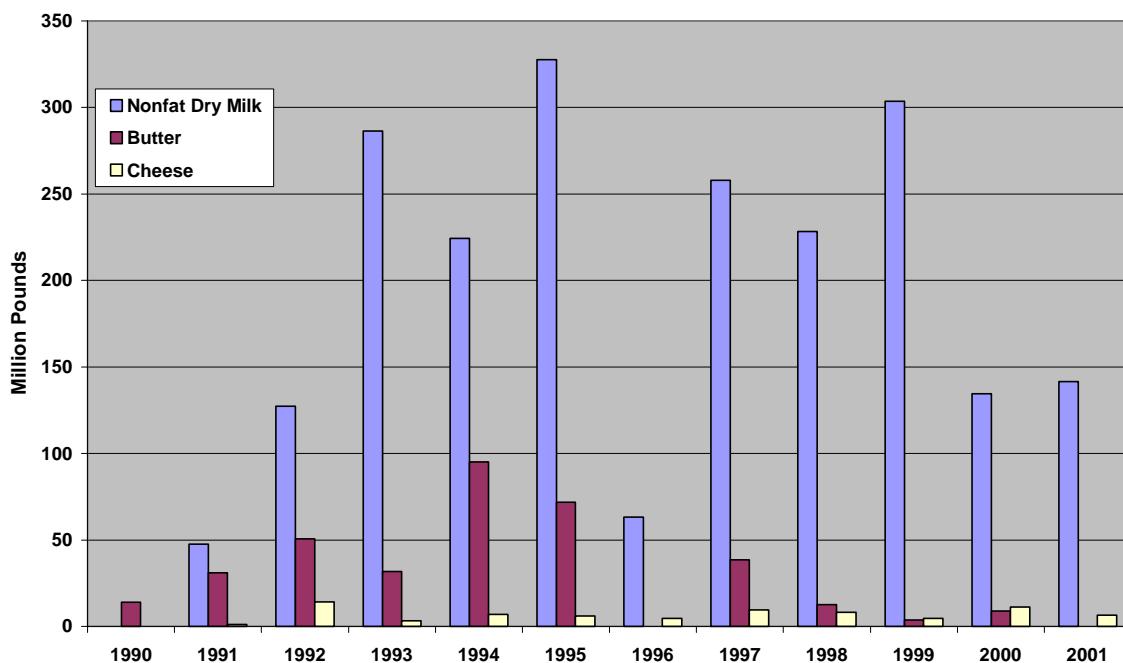
The Secretary may tilt butter and nonfat dry milk prices as often as twice a year in order to minimize CCC purchase costs or to "... achieve such other objectives as the Secretary considers appropriate."

The dairy price support program authorized under the new farm Act provides a reasonable safety net that should not encourage surplus milk production. Inclusion of the authority to alter butter and nonfat dry milk prices is an important feature of the new legislation. It should prevent price distortions in general, and specifically address a continuing build-up in stocks of nonfat dry milk, which are approaching 1 billion pounds. Despite the May 2001 tilt and recent softening in butter prices, they remain well above the CCC purchase price of \$0.8548 per pound. Consequently, another tilt in the near future would seem inevitable and desirable to correct market signals.

### **Dairy Export Incentive Program**

The Dairy Export Incentive Program (DEIP), as authorized by the Food Security Act of 1985 is extended through September 2007. DEIP is a dairy export subsidy program. Products eligible for DEIP subsidies are milk powders, butter and butterfat, and several cheese varieties. The U.S. prices of these dairy products are above world market prices. The purpose of DEIP is to assist the export of dairy products and international market development. DEIP sales are made by private firms. After contacting an eligible potential buyer the exporter submits a bid to USDA requesting a cash DEIP bonus that would allow the sale to take place.

**Dairy Export Incentive Program Removals**



Source: USDA, Economic Research Service, *Livestock, Dairy, and Poultry Outlook*, April 23, 2002.

DEIP has been beneficial in moving some of these products onto the world market when in surplus. In this manner DEIP has increased domestic U.S. milk prices. Since the 1990s, market prices for commodity cheeses have been well above world market prices and above the support price most of the time. Very little cheese has moved internationally under DEIP. In the mid-1990s, a fair amount of butter was exported under DEIP. But, most of the DEIP activity has been in nonfat dry milk.

### **Dairy Indemnity Program**

The Dairy Indemnity Program (DIP), as authorized by the Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations Act of 1998, is extended through 2007. The Secretary of Agriculture is authorized to make DIP payments to both dairy producers and dairy manufacturers until all funds have been expended. Payments are made to dairy producers who have been directed by a public agency to remove their raw milk from the commercial market because it has been contaminated by pesticides, nuclear radiation or fallout, or toxic substances and chemical residues other than pesticides. Payments are made to manufacturers of dairy products only for products removed from the market because of pesticide contamination. Affected producers and manufacturers apply for indemnity payments at their county FSA office.

### **Processor-Funded Fluid Milk Promotion**

A fluid milk processor (beverage milk) funded promotion program was authorized under the Fluid Milk Promotion Act of 1990. The program is referred to as MilkPEP. Fluid milk processors approved the implementation of MilkPEP. The purpose is to complement the mandatory 15 cents per hundredweight producer funded National Dairy Promotion and Research Program in increasing fluid milk sales.

The program was scheduled to terminate September 30, 2002 and is now extended to 2007 with one major change: All fluid milk processors who marketed at least 500,000 pounds of fluid milk products in consumer-type packages per month were required to help fund the program. This was changed to 3,000,000 pounds per month, excluding products delivered directly to the place of residence of a consumer. The funding rate is maintained at \$0.20 per hundredweight on fluid milk processed and marketed in consumer-type packages. A 20-member board appointed by the Secretary of Agriculture administers the program. Fifteen of the 20 members are fluid milk processors from geographic regions and five are at-large, of which at least three must be fluid milk processors and at least one must represent the public.

## **Mandatory Reporting of Dairy Product Inventories**

The bill strengthens the required mandatory reporting by milk processors of inventories of dairy products. At issue was what dairy products technically had to be reported. The intent of the Bill is to now require reporting by milk processors of all manufactured dairy products, and substantially identical products designated by the Secretary, subject to government programs including the dairy price support program, federal milk marketing orders and domestic feeding and nutrition programs. Market prices are sensitive to inventory reports. It is therefore crucial that these reports be as complete and accurate as possible.

## **Assessments on Dairy Imports**

A controversial provision is the requirement that importers of dairy products pay an assessment equivalent to the mandatory 15 cents per hundredweight that U.S. dairy farmers pay to fund the National Dairy Promotion and Research program. Included are dairy products imported in the form of milk, cream, fresh and dried dairy products, butter and butterfat mixtures, cheese, and casein and mixtures. It is estimated that an additional \$7 million would be added to the national program. Assessments collected on imported dairy products cannot be used for foreign market promotion.

Importers will have representation on the National Dairy Research and Promotion Board. Initially, the Secretary shall initially create 2 additional seats to represent importers. At least once every 3 years after the initial appointment, the Secretary shall review the average volume of domestic production of dairy products compared to the average volume of imports of dairy products. On the basis of that review, the Secretary is to reapportion importer representation on the Board to reflect the proportional share of the U.S. market by domestic production and imported dairy products.

## **Economic Studies**

The Secretary of Agriculture is required to conduct three comprehensive studies. One study is to evaluate the potential direct and indirect effects of various elements of national dairy policy on (1) farm price stability, farm profitability and viability, and local rural economies, (2) child, senior, and low-income nutrition programs, including impacts on schools and institutions participating in the programs, and on program recipients, and (3) the wholesale and retail cost of fluid milk and milk utilization. Included elements of national policy are federal milk marketing orders, interstate dairy compacts, over-order premiums negotiated by dairy cooperatives, state pricing programs such as California's state milk order, direct payments to producers, the dairy price support program, and dairy export programs such as DEIP.

A second related study is to evaluate the effects of major changes in federal dairy policy including (1) terminating all Federal programs relating to price support and supply

management and (2) granting the consent of Congress to cooperative efforts by states – such as the Northeast Compact – to manage milk prices and milk supply.,.

A third study is to examine fluid milk identity standards. The Secretary is to study the effects of including in the standard of identity for fluid milk a required minimum protein content that is commensurate with the average nonfat solids content of cow's milk.

While the language refers to "protein" content of fluid milk, what is meant is the solids-not-fat content. Current national fluid milk standards require a minimum of 8.25 percent solid-not-fat content of fluid milk products. The average solids-not-fat content of cow's milk is about 8.8 percent of which 3.2 percent is protein and 5.6 percent lactose and ash. The state of California requires higher minimum solids not fat content for fluid milk products sold within the state than the federal standards. The assumption is that higher solids standards for beverage milk may increase its taste appeal and consumption.

Each of these studies is to be completed not later than one year after the date of enactment of the Farm Bill. Reports are to be submitted to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate.

The issues included in these studies have all been studied in considerable depth in the past, many as part of earlier Congressionally-mandated USDA studies. Evidently, Congress would like better and more current information to make decisions regarding future changes in dairy policy.

### **Summary**

The Farm Security and Rural Investment Act of 2002 represents a major change in direction for U.S. federal dairy policy. While ad hoc market loss payments to dairy farmers were made three times since passage of the 1996 farm bill, the new Act makes deficiency payments a regular feature. This puts dairy in the same camp as program crops.

Other provisions within the dairy title continue programs created in the past with a few new wrinkles. Of particular importance, the dairy price support program, slated for termination in the 1996 farm bill, is reinstated. Assuming that the Secretary adheres to Congressional intent in making butter-powder tilts, the support program should provide a reasonable safety net for dairy farmers that will not consistently distort product markets.

At least for small and medium sized dairy farms, dairy deficiency payments mean a significantly higher safety net than the relatively low \$9.90 per hundredweight price support program by itself. On average, the target price is higher than what can be expected to be generated by the marketplace over the next four years. This means that deficiency payments will be made more often than not. There will no doubt be a supply response to this price enhancement that will lower market milk prices. This will increase the probability and size of deficiency payments. Dairy farmers will use the combination

of market prices and deficiency payments in deciding how much milk to produce, partially separating that decision from marketplace conditions.

The market loss program ends September 30, 2005. The big question is what then? Will deficiency payments be extended? Will the dairy compact debate resurface? Perhaps the three USDA studies will shed some light on the future direction of federal dairy policy.